

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

SECURITIES AND EXCHANGE
COMMISSION,

Plaintiff,

v.

TERRAFORM LABS PTE. LTD. and DO
HYEONG KWON,

Defendants.

Civil Action No. 23 Civ. 1346 (JSR)

Hon. Jed S. Rakoff

**MEMORANDUM OF LAW IN SUPPORT OF DEFENDANTS' MOTION TO EXCLUDE THE
OPINIONS AND TESTIMONY OF DR. MATTHEW EDMAN**

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Defendants Terraform Labs Pte. Ltd. (“TFL”) and Kwon Do Hyeong (collectively, “Defendants”) respectfully submit this memorandum of law in support of their motion to exclude the opinions and testimony of Dr. Matthew Edman (“Dr. Edman”) proffered by the Securities and Exchange Commission (“SEC”) under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

INTRODUCTION

Dr. Edman’s expert opinions should be excluded for two reasons: (1) he is not qualified as an expert in financial services payment systems,¹ and (2) his opinions lack sufficient factual support, in addition to being speculative, and unreliable—with Dr. Edman now changing the methodology that he originally employed in an effort to defend his original opinion.

The SEC offers Dr. Edman’s opinion in support of its allegation that Defendants falsely represented that Chai used the Terra blockchain to “process and settle” Chai payments between its users and merchants. Specifically, the SEC alleges that Defendants recorded completed Chai transactions onto the Terraform blockchain to make it appear as if they were processed on the blockchain when they were not. It also alleges that a server called the “LP Server,” received data about Chai transactions and then replicated the transactions on the Terraform blockchain as if they had been settled on the blockchain. The SEC seeks to introduce Dr. Edman as an expert to opine on whether Chai used the Terra blockchain to process and settle its transactions, and whether the “LP Server” blockchain transactions represent the processing and settlement of real world transactions on the Chai payment system.

Dr. Edman’s opinion, however, should be excluded. At the outset, Dr. Edman lacks the requisite expertise in financial services and payments to opine on the “processing and settlement” of transactions on a payment system like Chai. Dr. Edman’s experience relates to blockchain analysis and cybersecurity risk, which does not qualify him in the coding, systems architecture, and operation of payment systems, like Chai. He has no education in payment systems architecture,

¹ “Financial payment systems” includes what Dr. Edman refers to as “[REDACTED]” in his opinion, as used herein.

no work experience in financial services or assessing how commercial payment systems similar to Chai operate (or the underlying source code for these systems), never developed or evaluated a financial payment system, and never previously served as an expert on the analysis of source code for blockchain-based payment systems. Without any such education or practical work experience with payment systems like Chai, Dr. Edman cannot assess or reliably opine on the coding, systems architecture, and operation of a payment system like Chai, let alone consider the different scenarios in which Chai transactions could have been “processed and settled” in a manner that interacted with the blockchain.

But even if Dr. Edman is qualified to opine as to how the Chai payment system “processed and settled” transactions using the Terra blockchain, his opinion should be excluded as speculative and unreliable for the following reasons:

First, Dr. Edman’s purported analysis has a gaping hole. The only way to reliably assess whether Chai used the Terra blockchain to process and settle transactions is to analyze and test Chai’s computer code. You have to look under the hood to see how a car runs—and the same is true for a computerized payments system. Everything else is speculation. Yet, Dr. Edman admittedly [REDACTED]

[REDACTED]. His opinion is based largely on a review of only the [REDACTED]. He also admits that he has [REDACTED]. As a result, Dr. Edman lacks any factual foundation to render any reliable opinion at all as to how the Chai payment system operated as a whole, including whether it interacted with the blockchain to process and settle transactions.

Second, Dr. Edman did not review [REDACTED]. Dr. Edman explained that [REDACTED]. Yet, he admitted [REDACTED]. And he contradicts his opinion that t [REDACTED]. He also was unable

to determine whether the [REDACTED] that he reviewed were ultimately ever used. Dr. Edman's erroneous reliance on such speculative assumptions is aggravated by his failure to perform any analysis to test or replicate Chai or LP Server transactions—[REDACTED]

Third, in forming his opinions Dr. Edman never defined “processing and settlement” or provided any framework for evaluating “processing and settlement,”—a significant demonstration of his lack of financial services expertise.

Fourth, Dr. Edman based his opinion on his assessment that [REDACTED]
[REDACTED]
[REDACTED]. He also changed his methodology in his rebuttal report in an attempt to address this omission.

Finally, Dr. Edman improperly opines as to the motive behind the Chai payment system. This is an improper purview of expert testimony for which Dr. Edman's expert testimony has previously been excluded. *See United States v. Chastain*, No. 1:22-cr-00305 (JMF), 2023 WL 2966643, at *9 (S.D.N.Y. Apr. 17, 2023).

These deficiencies highlight and reinforce not only Dr. Edman's lack of qualifications as an expert in the field of financial services payment systems and “processing and settling” transactions, but also show his methodology and his evidence so defective and inadequate that his opinions are inherently speculative. As a result, Dr. Edman's opinion, evidence, and testimony must be excluded under *Daubert*.

BACKGROUND

The SEC offers Dr. Edman's opinion in support of its securities fraud claim related to the “Chai” payment system. “Chai” was a payment system, similar to PayPal or Venmo, that was first launched in June 2019 in South Korea by the Chai Corporation in partnership with TFL. Am. Compl. (hereinafter, the “AC”) ¶ 123; *see also* Ex. A, Medium Post, “June 2019 Terra Community Update”; Ex. B, Expert Report of Raj Unny (“Unny Report”) ¶ 27. Payment services such as Chai

require [REDACTED].² Unny Report ¶ 29.

A. The SEC’s Securities Fraud Claims Based on Chai

The SEC’s securities fraud claim underlying Chai centers around allegations that Defendants falsely represented that Chai used the Terra blockchain to “process and settle” payments between its users and merchants, and the Defendants did so in order to encourage purchases of the tokens using the Terraform blockchain. AC ¶¶ 5, 121–52. Specifically, the SEC alleges that, from 2019 to March 2022, Defendants falsely represented to institutional purchasers of TFL tokens that the “backend” of Chai transactions were being processed and settled using the Terraform blockchain, *id.* ¶ 5, using “KRT,” an algorithmic stablecoin pegged to the Korean fiat currency, the won. *Id.* ¶ 134. The SEC further alleges that TFL programmed a server, known as the “LP Server,” to receive and process data about Chai transactions, and then replicate those transactions “as if they had originally ‘settled’ on the Terraform blockchain.” *Id.* ¶ 135.

B. Dr. Edman’s Opinion

The SEC offers Dr. Edman as an expert in support of these allegations. According to Dr. Edman’s report, Dr. Edman reviewed the [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]’ Ex. C, Corrected Expert Report of Dr. Matthew J. Edman (“Edman Report”) ¶ 10. Dr. Edman then analyzed [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

² These components traditionally include: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. Unny Report ¶ 29.

██████████.” *Id.* Dr. Edman asserts that he reviewed ██████████
 ██████████
 ██████████
 ██████████. *Id.* ¶¶ 29, 41, 49–55, 56.
 Dr. Edman observed that ██████████ ██████████.” *Id.* ¶ 42.
 Notably, ██████████ Dr. Edman did not examine ██████████
 ██████████
 ██████████. Ex. D,
 September 20, 2023 Dep. Tr. of Matthew J. Edman (“Edman Dep. Tr.”) at 125:05–126:05. He also
 did not examine and could not determine ██████████
 ██████████. *Id.* at 98:13–100:06, 131:14–132:07, 149:13–150:08. In fact, Dr. Edman admitted that he
 did not have any knowledge of ██████████. Edman
 Report ¶ 41; Edman Dep. Tr. at 125:16–126:21.

Dr. Edman also never confirmed whether the ██████████.
 Edman Dep. Tr. at 154:19–155:10. Instead, he bases his opinion on the unfounded assumptions
 that the ██████████
 ██████████. *Id.* at 98:13–
 100:06, 154:19–55:10. Despite these omissions, Dr. Edman specifically denied ██████████
 ██████████
 ██████████. *Id.* at 136:2–12.

In formulating his opinions in this case, Dr. Edman omitted any discussion for defining
 “processing” or “settlement.” The meaning of “settlement” in financial services and payments is
 variable and depends on the context and structure of the specific payment system under

³ According to Dr. Edman, ██████████
 ██████████. Edman Report ¶¶ 29

consideration.⁴ Central bank authorities and financial services experts observe that “[REDACTED]
[REDACTED]
[REDACTED]” Unny Report ¶ 52 (citing BIS Report at 9–10). And these same authorities have noted that, as a result, [REDACTED]
[REDACTED], with some arrangements being “[REDACTED]
[REDACTED]
[REDACTED].” Unny Report ¶ 53 (citing BIS Report at 15–16).

Nonetheless, in formulating his opinions Dr. Edman did not define “processing” or “settlement” in his analysis or report, or provide any framework for determining the meaning of “processing and settlement” in the context of the Chai payment system. Edman Report ¶¶ 7, 10, 11, *et seq.*; *see also* Unny Report ¶¶ 41, 53, 54; Edman Dep. Tr. at 183:15–21.

Despite these omissions, Dr. Edman opines that (1) [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].

Based on these findings, Dr. Edman concluded that the “[REDACTED]
[REDACTED]

⁴ Unny Report ¶ 53 (citing Bank for Int’l Settlements: Comm. On Payments and Market Infrastructures, “Distributed ledger technology in payment, clearing and settlement,” at 15–16 (Feb. 2017), <https://bit.ly/46HIPL3> (“BIS Report”)); *see also* Unny Dep. Tr. at 221:14–222:09.

Pursuant to Rule 702 of the Federal Rules of Evidence, a “witness who is qualified as an expert by knowledge, skill, experience, training, or education” may offer an opinion if “the expert’s scientific, technical, or other specified knowledge will help the trier of fact to understand the evidence or to determine a fact in issue,” and the testimony is the product reliable facts and methods, that the expert has “reliably applied” to the case. Fed. R. Evid. 702. “[T]he proponent of expert testimony has the burden of establishing by a preponderance of the evidence that the admissibility requirements of Rule 702 are satisfied.” *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007).⁵

⁵ (Unless otherwise indicated, internal citations and quotation marks are omitted, and emphasis is in the original.)

ARGUMENT

I. Dr. Edman’s Opinion Should be Excluded Because He is Not Qualified as an Expert on Payment Systems Like Chai

Dr. Edman lacks sufficient expertise in financial payment systems or payment processes to testify as an expert on the “processing” or “settlement” of payment systems similar to Chai. “Whether a witness is qualified as an expert is a threshold question that precedes the court’s relevance and reliability inquiries.” *LVL XIII Brands, Inc. v. Louis Vuitton Malletier S.A.*, 209 F. Supp. 3d 612, 636 (S.D.N.Y. 2016), *aff’d*, 720 F. App’x 24 (2d Cir. 2017). An expert’s qualifications are determined “by comparing the area in which the witness has superior knowledge, skill, experience, or education with the subject matter of the witness’s testimony.” *Faulkner v. Arista Recs., LLC*, 46 F.Supp.3d 365, 375 (S.D.N.Y. 2014). “Where a witness’s ‘expertise is too general or too deficient,’ the Court ‘may properly conclude that [he is] insufficiently qualified.’” *LVL XIII Brands, Inc.*, 209 F. Supp. 3d at 636.

Here, Dr. Edman lacks the requisite expertise in financial payment systems and processes to reliably opine on the meaning of “processing” and “settlement” or the proper framework to determine what these terms mean within a financial payment system. Neither his report nor CV makes any reference to education or studies related to such payment systems or financial services, Edman Report ¶¶ 1–9 and Ex. 1 (Edman CV), and Dr. Edman was unable to identify any such specialization. Edman Dep. Tr. at 18:17–20:13. Further, his work experience with payment systems was limited to his generalized experience assessing cybersecurity risks or how cryptocurrency is used for payments. *Id.* at 21:13–22:15; 30:18–31:09; 33:24–37:12. Outside of these limited experiences, Dr. Edman could not recall any time he had worked in financial services, let alone assessed financial payment systems similar to Chai operate or reviewed the underlying source code for these systems. *Id.* at 25:03–26:19; 28:07–23; 37:08–40:04. Further, Dr. Edman had neither experience building any kind of payment systems, *id.* at 25:03–26:19, nor previously

served as an expert on the analysis of source code of blockchain-based payment systems.⁶ *Id.* at 43:06–50:04.

Dr. Edman has general experience with blockchain analysis in the context of analyzing cybersecurity risk or how cryptocurrency is used for payments, but this experience does not qualify him to be an expert on the operation of a financial payment system like Chai, including its underlying coding, systems architecture, and use of the blockchain. Courts have found that expertise in a broad field does not extend to qualify an expert in narrow applications in the same field. *See, e.g., S.E.C. v. Lek Sec. Corp.*, 370 F. Supp. 3d 384, 407-13 (S.D.N.Y. 2019) (finding a expert’s experience in “finance and economics” did not qualify him to testify about the more narrow topic of “layering or Cross-Market Strategy”); *S.E.C. v. Toure*, 950 F. Supp. 2d 666, 677–78 (S.D.N.Y. 2013) (excluding an expert’s opinion where the expert’s general expertise in structured finance was “so broad a category as to become meaningless when particularized” to the subject of financial products like collateralized debt obligations). Further, it is well-settled that an “expert’s qualifications about the various aspects” of a particular product does not “make that person an expert in the design” or operation of those products. *See Jinn v. Sig Sauer, Inc.*, No. 1:20-CV-01122-PGG-RWL, 2023 WL 2919558, at *7 (S.D.N.Y. Apr. 12, 2023) (collecting cases). Thus, Dr. Edman’s generalized experience with blockchain analysis and cybersecurity risk does not qualify him as an expert in the design or operation of payment systems like Chai. For this reason, Dr. Edman’s opinion should be excluded in its entirety.

II. Dr. Edman’s Opinion Should be Excluded Because It is Unreliable

Even if Dr. Edman were qualified to offer an opinion as to whether Chai used the Terra blockchain to process and settle transactions, his opinion and testimony should be excluded because they are not the product of reliable principles and methods, and he has not reliably applied

⁶ In fact, Dr. Edman doesn’t seem to understand what exactly constitutes a blockchain-based commercial payment systems or application. For example, when asked if he has provided expert witness testimony about a blockchain-based payment system or application, Dr. Edman referred to *United States v. Chastain*, No. 1:22-cr-00305 (JMF), 2023 WL 2966643 (S.D.N.Y. Apr. 17, 2023), a case in which he provided testimony about the OpenSea platform (Edman Dep. Tr. at 43:06–44:13), which is not a commercial payment systems application, but a non-fungible token (“NFT”) marketplace.

the principles and methods to the insufficient facts he considers. When assessing whether a proposed expert’s testimony is sufficiently reliable to be permitted, the Court “should consider the indicia of reliability identified in Rule 702, namely, (1) that the testimony is grounded on sufficient facts or data; (2) that the testimony is the product of reliable principles and methods; and (3) that the witness has applied the principles and methods reliably to the facts of the case.” *Williams*, 506 F.3d at 160.

Dr. Edman’s opinions fail all aspects of this reliability analysis. His opinion centers around the core conclusion that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]” Edman Report ¶ 70. But a closer examination of his findings demonstrate that in forming his opinions Dr. Edman (1) did not examine [REDACTED]

[REDACTED]; (2) never confirmed whether the [REDACTED] he reviewed was ever used and did not test it; (3) did not define “processing” or “settlement” or provide any framework for evaluating “processing and settlement” in the context of the Chai payment system; (4) did not examine and could not determine [REDACTED]

[REDACTED]; and (5) based his opinion on his assessment that the [REDACTED]

[REDACTED] and, in his surrebuttal, changed his methodology in an attempt to defend this omission. Given these flaws, Dr. Edman’s opinion as to how Chai or the LP Server uses the blockchain to “process and settle” transactions should be excluded.

A. Dr. Edman Failed to Review Key Data and Information About the Chai Payment System and the LP Server

Dr. Edman’s failure to determine key facts—notably the role of the LP Server within the Chai payment system—precludes his opinion [REDACTED]

[REDACTED] and did not represent the [REDACTED]

Chai was [REDACTED]. Unny Report ¶ 29.⁷ In order to determine whether and how each of these components apply to the transactions executed by the LP Server, Dr. Edman needed to examine [REDACTED]. Unny Report ¶¶ 39, 43; Ex. E, October 9, 2023 Dep. Tr. of Raj Unny (“Unny Dep. Tr.”) at 230:13–231:12. Yet, Dr. Edman only reviewed the [REDACTED]. Edman Report ¶¶ 29, 41, 49–55, 56. He admitted that he did not review [REDACTED] and lacked knowledge of how [REDACTED]. Edman Dep. Tr. at 125:05–126:05. Without understanding the payment process and components of the Chai payment system, Dr. Edman cannot reliably opine whether or how Chai used the blockchain to process and settle Chai transactions and how it used LP Server to do so.⁸

Dr. Edman also directly contradicted his opinion that transactions on Chai [REDACTED]. [REDACTED] Edman Report ¶ 70. During his deposition, he admitted that he did not [REDACTED] Edman Dep. Tr. at 139:25–140:04 (emphasis added). Without more information, he acknowledged that he could only conclude that the [REDACTED],” *Id.* at 138:7–22 (emphasis added). Dr. Edman’s failure to determine the parameters of the Chai payment process and his admission that he does not know if [REDACTED]

⁷ Notably, Dr. Edman implicitly acknowledges the existence of these components when he described [REDACTED]” Edman Report ¶ 26.

⁸ Dr. Edman’s failure to examine the Chai payment process is especially problematic considering Dr. Edman did not take into account the existence of “[REDACTED]” that contained [REDACTED]

[REDACTED] Unny Report ¶ 46.

contradict his opinion that the [REDACTED]
[REDACTED] and render this opinion speculative.

B. Dr. Edman’s Opinion as to the Operation of the Source Code Relies on Unfounded Assumptions.

Dr. Edman’s opinion as to whether Chai used the Terra blockchain to process and settle transactions is also unreliable because he lacked the necessary data to determine whether [REDACTED]
[REDACTED]
[REDACTED]

First, Dr. Edman relied on speculative assumptions in his assessment of [REDACTED]
[REDACTED]. During his deposition, Dr. Edman recognized that the s [REDACTED]
[REDACTED]. Edman Dep. Tr. at 129:16–130:07, 131:14–32:07, 170:15–:22. However, Dr. Edman only reviewed “[REDACTED]
[REDACTED]. *Id.* at 98:13–100:06. Dr. Edman admitted in his testimony that he did not know [REDACTED]
[REDACTED]. *Id.* at 149:13–150:08. In doing so, Dr. Edman admitted—contrary to his opinion that [REDACTED]
[REDACTED]—that he did not have sufficient information to determine whether the [REDACTED] *Id.* He further admitted that the inputs to the LP Server could have come from an “organic”⁹ user, which would include individual Chai users. *Id.* Based on these admissions, the Court should agree with Dr. Edman’s own admission that he “would just be speculating” as to whether the application was run by a human, *Id.* at 149:13–150:08, and find his opinion excluded as speculative and unreliable. *Mirror Worlds Techs., LLC v. Facebook, Inc.*, 588 F. Supp. 3d 526, 556–57 (S.D.N.Y.

⁹ Edman defined “organic” as “[REDACTED]
[REDACTED]” Edman Dep. Tr. at 148:08–:19.

2022) (excluding opinion where expert could not “verify what user action produced” the evidence considered in his report).

Second, Dr. Edman engaged in similarly flawed analysis when conducting his review of the use of [REDACTED]. During his deposition, Dr. Edman further explained that the “[REDACTED] [REDACTED]” Edman Dep. Tr. at 150:09–151:15. Nonetheless, Dr. Edman admitted that he was unable to “[REDACTED]” and that his was only opining as to [REDACTED]” *Id.* at 154:19–55:10; *see also id.* at 152:13–53:14 (recognizing that “access to the LP server may provide additional information, such as whether or when or by who these scripts were run and with what inputs.”).

Thus, Dr. Edman’s opinion relies on the speculative assumption that the [REDACTED] [REDACTED] as well as that [REDACTED], without any evidence of these [REDACTED]. Courts have found that an expert’s reliance on such unfounded assumptions that a hypothetical event could take place renders the expert’s opinion unreliable. *Buckley v. Deloitte & Touche USA LLP*, 888 F. Supp. 2d 404, 413 (S.D.N.Y.2012) (expert report excluded because it relied ““unfounded assumptions about what”“ might have happened “if certain hypothetical events took place.”); *T.N. Incorporation, Ltd. v. Fid. Nat’l Info. Servs., Inc.*, 2021 WL 5980048, at *5 (E.D. Pa. Dec. 17, 2021) (finding an expert could not reliably ascertain conclusions from facts available where opinion only described how API software *could* work). Similarly, Dr. Edman’s reliance on these unfounded assumptions that certain [REDACTED] mandates that his opinion be excluded as unreliable.

Further, even though Dr. Edman asserted that he assessed what the [REDACTED], he failed to perform any analysis to test or replicate Chai or LP Server transactions. “In analyzing the reliability of an expert’s testimony, the key question is whether it can be (and has been) tested.” *Rypkema v. Time Mfg. Co.*, 263 F. Supp. 2d 687, 692 (S.D.N.Y. 2003). Dr. Edman specifically denied [REDACTED]

C. Dr. Edman’s Methodology for Determining the “Processing and Settlement” of a Chai Payment is Contrary to Industry Standard and Practice and is Fundamentally Flawed

¹⁰ Indeed, the request for Chai code, documentation, and data was made by defendants in a joint Letter of Request to Korea. *See* Attachment B to Letter of Request for International Judicial Assistance to the Chai Corporation in the Republic of Korea (“Chai Letter of Request”), ECF No. 46-1; August 16, 2023 Docket Entry issuing the Chai Letter of Request.

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Having a well-founded basis and framework to determine the meaning of these terms within the structure of Chai payment system is significant because the SEC’s claims are based on this very point. *See, e.g.*, AC ¶¶ 5, 121, 126. However, as mentioned above, the meaning and application of the terms “processing and settlement” [REDACTED] [REDACTED]. Unny Report ¶¶ 53–54; BIS Report 9–10, 15. As recognized by the Bank for International Settlements’ (“BIS”) Committee on Payments and Market Infrastructure, a leading international organization that supports central banks and financial authorities around the world owned by 63 member central banks, blockchain payment systems can “vary significantly based on their functionality, nature of service, design, technology and processes,” thereby implicating a variety of potential processing and settlement arrangements depending on the payment service at issue.¹² Settlement on a blockchain can be represented [REDACTED] [REDACTED] [REDACTED].¹³ Unny Report ¶ 53.

But Dr. Edman cannot formulate an opinion on what it means for the Chai payment system to process and settle transactions when the basis for this opinions is devoid of any basis for understanding the connection between LP Server and the rest of the Chai payment system, *see supra* Section II.A, or any basis understanding how the design and operation of the payment system inform meaning of the processing and settling in that system. The complete lack of any basis for

¹² Bank for Int’l Settlements: Comm. On Payments and Market Infrastructures, “Distributed ledger technology in payment, clearing and settlement,” at 9–10 (Feb. 2017), <https://bit.ly/46HIPL3> (“BIS Report”).

¹³ Specifically, the BIS has recognized that:

Some arrangements are based on updating balances in the ledger (that is, the ledger is recording positions through debits and credits). Some arrangements are based on transferring digital assets in the ledger (that is, the ledger is recording the transfer of ownership of a specific digital asset that exists only on the ledger). Yet other arrangements are based on transferring digital representations of a physical asset that is held in custody (i.e., the ledger is recording transfers of assets held elsewhere). In the context of a payment system, for example, an arrangement could be updating a balance, transferring digital currency or updating an account balance reflecting monies held at a custodian bank.

BIS Report at 15–16; *see also* Unny Report ¶ 53.

Dr. Edman’s opinion on processing and settlement reveals that merely parroted the undefined terms in the AC—adopting “a conclusion by lawyers and worked backwards to hypothesize a mechanism by which it might occur.” *In re Mirena IUD Prod. Liab. Litig.*, 169 F. Supp. 3d 396, 430 (S.D.N.Y. 2016) (excluding expert opinion). In the absence of a “clear definition of [processing and settlement], or some testimony as to those meanings” in connection with the operation of payment system like Chai, Dr. Edman’s opinion “is not sufficiently supported to be admissible.” *Thor Equities, LLC v. Factory Mut. Ins. Co.*, 627 F. Supp. 3d 330, 346 (S.D.N.Y. 2022). Such an opinion amounts to little more than “subjective belief or unsupported speculation,” *Navigators Ins. Co. v. Goyard, Inc.*, 608 F. Supp. 3d 44, 48 (S.D.N.Y.), and must be excluded under *Daubert*.

D. Dr. Edman’s Methodology for Determining that the LP Server Operated a “Closed System” of Wallets to Execute Transactions is Fundamentally Flawed

Dr. Edman also lacks any factual basis or reliable application of a proper methodology to conclude that the Chai transactions occurred [REDACTED] and that as a result [REDACTED]. Edman Report ¶ 11(d).

The assessment that Dr. Edman made in his initial report that the [REDACTED]. Any conclusion that the [REDACTED]. Unny Report ¶ 59. However, Dr. Edman failed to do either. The data that Dr. Edman produced with his report identified that, [REDACTED]. Unny Report ¶ 58. [REDACTED]. *Id.* And a cursory review of just one of these wallets involved in the [REDACTED]

[REDACTED]. *Id.* ¶ 59. Nonetheless, Dr Edman initial report omitted any discussion of these wallets.

Dr. Edman's sur-rebuttal report demonstrates his failure to reliably apply the methodology he used in making his original assessment that the [REDACTED]." In this report he changes the methodology in an apparent attempt to defend his omission of [REDACTED] [REDACTED]. After confirming that [REDACTED]

_____, (Ex. F, Rebuttal Expert Report of Dr. Matthew J. Edman (“Edman Reb. Report”) ¶¶ 15, 18), Dr. Edman adopts a new methodology for determining _____. Dr. Edman originally concluded that _____

Report ¶¶ 15, 47. However, in his sur-rebuttal report he implicitly acknowledges that [REDACTED]. Edman

_____. Edman Reb. Report ¶¶ 18–19. Dr. Edman nonetheless concludes that the _____

[REDACTED]. Edman Reb. Report ¶ 22. However, in his original report when Dr. Edman sees [REDACTED]

[REDACTED] *Id.* ¶ 17; see also Edman Report ¶ 11. Not only does Dr. Edman fail to provide any evidence as to the [REDACTED] [REDACTED], but his sur-rebuttal position indicates a change to his methodology that clearly demonstrates the unreliability of his opinions.

Further, Dr. Edman’s initial opinion ignored other key aspects of the Chai payment system—notably, the [REDACTED]

[REDACTED], (Unny Report ¶¶ 62–63)—a feature that

would contradict Dr. Edman's conclusion that [REDACTED]. Thus, it would have been necessary for Dr. Edman to review and account for the [REDACTED] before making conclusions about the [REDACTED]. Nonetheless, Dr. Edman admitted to never reviewing the code underlying this function. Edman Dep. Tr. at 202:04–203:04. While Dr. Edman later acknowledges in his rebuttal report that the [REDACTED] [REDACTED] [REDACTED]. Edman Reb. Report ¶¶ 62–64.

Dr. Edman also failed to consider that it is a [REDACTED] [REDACTED]¹⁴ Unny Report ¶¶ 48–51. During his deposition, Dr. Edman acknowledged that it was [REDACTED] [REDACTED]. Edman Dep. Tr. at 194:15–95:02. These arrangements contradict Dr. Edman's claims that [REDACTED] [REDACTED]

Based on these facts and Dr. Edman's changing methodology, his characterization of the [REDACTED] cannot stand or serve as a basis for his opinion that the [REDACTED] [REDACTED]

E. Dr. Edman Improperly Opines as to the Intention of the Chai Payment Service

Dr. Edman's opinion as to whether Chai or the LP Server uses the blockchain to “process and settle” transactions should also be excluded because it improperly opines as to the motive behind the Chai payment system and its operators. Dr. Edman opines as to the [REDACTED] [REDACTED] Edman Report ¶¶ 11(a), and, as mentioned above, that the software [REDACTED] Edman Dep. Tr. at 138:7–:22 (emphasis added). However, these opinions amount to judgments on the intent or motive

¹⁴ Dr. Edman defined [REDACTED] [REDACTED] Edman Dep. Tr. at 143:03–:06.

behind the LP Server’s use, which is an improper scope for expert testimony. Courts regularly exclude assertions concerning “interpretations of conduct” or “views as to the motivation of parties” offered in the guise of expert testimony. *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531, 541 (S.D.N.Y. 2004); *see also Scott v. Chipotle Mexican Grill, Inc.*, 315 F.R.D. 33, 45 (S.D.N.Y. 2016) (“[E]xperts may not offer opinions regarding the intent or motive of parties as part of their analysis.”); *Taylor v. Evans*, No. 1:94-cv-08425, 1997 WL 154010, at *2 (S.D.N.Y. April 1, 1997) (excluding similar expert testimony as “musings as to defendants’ motivations [that] would not be admissible if given by any witness—lay or expert.”); *see also DePaepe v. General Motors Corp.*, 141 F.3d 715, 720 (7th Cir. 1998) (trial court erred by allowing expert to testify as to why General Motors had reduced the amount of padding in its automobile sun visors; expert “lacked any scientific basis for an opinion about the motives of GM’s designers.”). This is because “the question of intent is a classic jury question and not one for the experts.” *In re Rezulin*, 309 F. Supp. 2d at 547. Such testimony would amount to conjecture, speculation, and guesswork that is beyond the ken of any putative expertise that Dr. Edman may have in cryptocurrency and cybersecurity,¹⁵ and thus should be excluded.

CONCLUSION

For the foregoing reasons, Defendants respectfully requests that the Court exclude the opinions and testimony of Dr. Matthew Edman.

Date: October 27, 2023

Respectfully submitted,

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¹⁵ Notably, Dr. Edman’s expert testimony has previously been excluded on these grounds. *See Chastain*, 2023 WL 2966643, at *9.

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CERTIFICATE OF SERVICE

I, Mark G. Califano, certify that I caused a true and correct copy of the foregoing to be served on all counsel of record via the Court's ECF system on October 27, 2023.

/s/ Mark G. Califano
Mark G. Califano